

REMARKS

In response to the above-identified Office Action, Applicants amend the application and seek reconsideration thereof. In this response, Applicants amend Claims 1, 5-7, 11-13, 21, 24, 25, 28 and 30. Applicants cancel Claims 4, 10, 20, 22 and 23 without prejudice or disclaimer. Applicants do not add any new claims. Accordingly, Claims 1-3, 5-9, 11-19, 21 and 24-30 are pending.

I. Claims Rejected Under 35 U.S.C. §102(b)

A. U.S. Patent No. 5,807,117

The Examiner rejects Claims 1-14, 18, 19, 22, 23, 25 and 28-30 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,807,117 to Kempf, et al. ("Kempf"). Applicants cancel claims 22 and 23. Applicants amend independent Claims 1, 7, 13, 25 and 28 to overcome the rejection of the pending claims.

In order to anticipate a claim, the relied upon reference must disclose every limitation of the claim. Among other limitations, amended independent Claim 1 defines an apparatus comprising directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards. Thus, the claimed invention is directed to directly connecting computing devices.

In making the rejection, the Examiner relies on Kempf to show a combination digital signal and radio frequency connector for directly coupling a motherboard to a radio frequency board (Figure 12). Applicants respectfully submit that Kempf fails to teach or suggest a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

Accordingly, Applicants respectfully requests withdrawal of the rejection of independent Claim 1. Claims 2, 3, 5, and 6 depend from Claim 1 and are not anticipated at least for the same reasons as Claim 1.

Referring to independent Claim 7, among other limitations, amended Claim 7 defines an apparatus comprising a radio frequency board adapted for directly coupling to a motherboard of a computer and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

In making the rejection, the Examiner relies on Kempf to show a radio frequency board having a combination digital signal and radio frequency connector adapted for directly coupling to a motherboard for a computer (Figure 12). Applicants respectfully submit that Kempf fails to teach a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

Accordingly, Applicants respectfully request withdrawal of the rejection of independent Claim 7. Claims 8, 9, 11 and 12 depend from Claim 7 and are not anticipated at least for the same reasons as Claim 7.

With regard to the rejection of Claims 13, 14, 18 and 19, the Examiner stated that Claim 20 would be allowable if written in independent form including all of the limitations of the base claim and any intervening claims. Applicants respectfully submit that amended independent Claim 13 is Claim 20 rewritten in independent form including all of the limitations of the base claim and any intervening claims. Therefore, Claim 13 is allowable.

Accordingly, Applicants respectfully request withdrawal of the rejection of amended independent Claim 13. Claims 14, 18 and 19 depend from Claim 13 and are not anticipated at least for the same reasons as Claim 13.

Regarding the rejection of Claim 25, amended Claim 25 among other limitations recites a method comprising assembling a male coaxial connector and a female coaxial connector, wherein a ground connection from the ground spring cage and ground barrel are each, respectively, coupled to a surface co-planar waveguide ground.

The Examiner relies on Kempf to show all of the limitations of Claim 25 (Figure 12). Applicants respectfully submit that Kempf fails to teach or suggest a method comprising assembling a male coaxial connector and a female coaxial connector, wherein a ground connection from the ground spring cage and ground barrel are each, respectively, coupled to a surface co-planar waveguide ground. Accordingly, Applicant respectfully requests withdrawal of the rejection of independent Claim 25.

In rejecting independent Claim 28, the Examiner relies on Kempf to show a method of connecting direct board to board radio frequency coaxial connectors where the connectors comprise a ground shield spring cage and a ground shield barrel. Applicants respectfully submit Kempf fails to teach or suggest a method comprising coupling a ground connection from the ground shield cage and ground shield barrel to a surface co-planar waveguide ground.

Accordingly, Applicant respectfully requests withdrawal of the rejection of independent Claim 28. Claims 29 and 30 depend from Claim 28 and are not anticipated at least for the same reasons as Claim 28.

B. U.S. Patent No. 5,828,272

The Examiner rejects Claims 1-3, 7-9, 22 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,828,272 to Romerein, et al. ("Romerein"). Claim 22 is canceled. Applicants amend independent Claims 1 and 7 to overcome the rejection of the pending claims.

In order to anticipate a claim, the relied upon reference must disclose every limitation of the claim. Amended independent Claim 1 recites among other limitations an apparatus comprising directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

The Examiner relies on Romerein to teach a digital signal and radio frequency connector, motherboard, a radio frequency board and a pin and receptacle connection having a tulip shape. Applicants respectfully submit Romerein neither teaches nor suggests an apparatus comprising

directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

Accordingly, Applicants respectfully request withdrawal of the rejection of amended independent Claim 1. Claims 2 and 3 depend from Claim 1 and are not anticipated at least for the same reasons as Claim 1.

Amended independent Claim 7 recites among other limitations an apparatus comprising directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

As mentioned above, Applicants respectfully submit Romerein neither teaches or suggests an apparatus comprising directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

Accordingly, Applicants respectfully request withdrawal of the rejection of amended independent Claim 7. Claims 8 and 9 depend from Claim 7 and are not anticipated at least for the same reasons as Claim 7.

C. U.S. Patent No. 6,099,322

The Examiner rejects Claims 1-3, 7-9, 22 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,099,322 to Beloritsky, et al. ("Beloritsky"). Claim 22 is canceled. Applicants amend independent Claims 1 and 7 to overcome the rejection.

In order to anticipate a claim, the relied upon reference must disclose every limitation of the claim. Amended independent Claim 1 recites among other limitations an apparatus comprising directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection

surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

The Examiner relies on Beloritsky to teach a digital signal and radio frequency connector, motherboard, a radio frequency board and a pin and receptacle connection having a tulip shape. Applicants respectfully submit Beloritsky neither teaches or suggests an apparatus comprising directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

Accordingly, Applicants respectfully request withdrawal of the rejection of amended independent Claim 1. Claims 2 and 3 depend from Claim 1 and are not anticipated at least for the same reasons as Claim 1.

Amended independent Claim 7 recites among other limitations an apparatus comprising directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

As mentioned above, Applicants respectfully submit Beloritsky neither teaches or suggests an apparatus comprising directly coupling a motherboard to a radio frequency board and a spring cage and barrel connection surrounding a ground line, wherein the ground connection from the spring cage and barrel are each coupled to a surface co-planar waveguide ground on their respective boards.

Accordingly, Applicants respectfully request withdrawal of the rejection of amended independent Claim 7. Claims 8 and 9 depend from Claim 7 and are not anticipated at least for the same reasons as Claim 7.

II. Claims Rejected Under 35 U.S.C. §103(a)

The Examiner rejects Claims 15-17, 26 and 27 under 35 U.S.C. 103(a) as being obvious over Kempf. Applicants amend Claim 13 to overcome this rejection of Claims 15-17 and traverse the rejection of Claims 26 and 27.

In order to render a claim obvious, the relied upon references must teach or suggest every limitation of the claim such that the invention as a whole would have been obvious at the time the invention was made to one skilled in the art. As mentioned above, amended Claim 13 is Claim 20 in independent form and includes all of the limitations of the base claim and any intervening claims. Therefore, Claim 13 is allowable.

Claims 15-17 depend from Claim 13. Therefore, Claims 15-17 are not obvious at least for the same reasons as Claim 13.

With regard to the rejection of Claims 26 and 27, the Examiner has not put forth any additional grounds for rejection than recited above. Therefore, Applicants incorporate by reference the arguments put forth above. Accordingly, Applicants respectfully requests withdrawal of the rejection of Claims 26 and 27.

III. Allowable Subject Matter

Applicants note with appreciation the Examiner's indication that Claims 20, 21 and 24 would be allowable if rewritten in independent form to include all of the limitations of the base claims and any intervening claims. As mentioned above, Applicants respectfully submit that Claim 20 has been rewritten in independent form including all of the limitations of the base claim and any intervening claims as independent Claim 13. Applicants have made minor changes to Claim 13 to correct some prior inconsistencies in the claim. Applicants respectfully submit that amended independent Claim 24 is rewritten in independent form including all of the limitations of the base claim and any intervening claims. Therefore, Claims 13 and 24 are allowable.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending (1) are in proper form, (2) are neither obvious nor anticipated by the relied upon art of record, and (3) are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

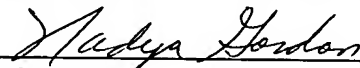
Dated: 7/27, 2003


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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage on the date indicated below as first class mail in an envelope addressed to: Mail Stop Non-Fee Amendments, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on 7/24/03.


Nadya Gordon
Date 7/24/03